

Building on armhf linux - Armbian - Orange Pi

[Armbian.com](https://www.armbian.com) offers opensource "Linux for arm" kernels with Debian and Ubuntu distros. They have come from Rev 5.05 in Apr, 2016 to 5.38 now.

These instructions are valid for Orange Pi PC Plus(H3 armhf) and OPi PC 2(H5 arm64), Armbian 5.75 Ubuntu 18.04 Bionic, and Debian 9 Stretch and OpenCPN 5.0.0 Mar, 2019.
(I hate instructions that are not dated!)

=== Update the system software ===

```
orangeipc$ sudo apt update
orangeipc$ sudo apt upgrade
```

OS Fixes required

Some modules require a lot of memory to compile and the system comes with only 128MB so I plugged in a thumb-drive with a linux 1.2GB swap partition and

```
orangeipc$ sudo mkswap -f /dev/sda5
orangeipc$ sudo swapon /dev/sda5
```

Follow the standard Linux build instructions for Ubuntu/Debian:

Clone the OpenCPN repository

As a normal user get the source code

```
git clone https://github.com/OpenCPN/OpenCPN.git
cd OpenCPN
mkdir build
cd build
```

Compile, Package and Install

```
cmake -DCFLAGS="-O2 -march=native" -DBUNDLE_DOCS=OFF -DBUNDLE_TCDATA=ON -
DBUNDLE_GSHHS=LOW ../
make package
```

Install some charts and test in the normal way.

Compile, Package and Install

Follow the standard Linux build instructions for Ubuntu/Debian:

```
cmake -DCFLAGS="-O2 -march=native" -DBUNDLE_DOCS=OFF -DBUNDLE_TCDATA=ON -  
DBUNDLE_GSHHS=LOW ../  
make package
```

Alternative to install GSHHS and Tide Data

```
cd ~/opencpn/build  
cmake -DOCPN_BUNDLE_TCDATA=ON -DOCPN_BUNDLE_GSHHS=CRUDE ..  
sudo make install
```

Install some charts and test in the normal way.

From:
<https://opencpn.org/wiki/dokuwiki/> - **OpenCPN Manuals**

Permanent link:
https://opencpn.org/wiki/dokuwiki/doku.php?id=opencpn:developer_manual:developer_guide:compiling_linux:building_on_armhf_linux_-_armbian_-_orange_pi

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